

Title (en)  
A self ballasted fluorescent lamp and lighting fixture

Title (de)  
Kompakt-Leuchtstofflampe und Lampenhalterung

Title (fr)  
Lampe fluorescente compacte et fixation de lampes

Publication  
**EP 0948244 A3 20001213 (EN)**

Application  
**EP 99106589 A 19990331**

Priority  

- JP 8756298 A 19980331
- JP 4949999 A 19990226
- US 28242999 A 19990331

Abstract (en)  
[origin: EP0948244A2] A self ballasted fluorescent lamp includes a rectifier (4a) which full wave rectifies AC power (1) from a commercial source. A smoothing capacitor (C2) smoothes the rectified power. The smoothed, rectified power is provided to a high frequency generating circuit (HFG) which drives the fluorescent lamp (DL). The capacitance value C of the smoothing capacitor (C2) is selected such that  $W \geq \alpha C$ , where W (in watts) is the rated service power of the fluorescent lamp (DL), and alpha is related to a ratio of W to C0 (in  $\mu F$ ). C0 is a capacitance value of the smoothing capacitor (C2) for which the 5th harmonic component of the input current is 61% of the fundamental component of the input current when the fluorescent lamp operates under fixed conditions. When the above condition is met, the percentage of harmonic content falls within IEC standards. <IMAGE>

IPC 1-7  
**H05B 41/29**

IPC 8 full level  
**H02M 7/538** (2007.01); **H02M 7/5383** (2007.01); **H05B 41/24** (2006.01); **H05B 41/28** (2006.01); **H05B 41/282** (2006.01); **H05B 41/295** (2006.01)

CPC (source: EP US)  
**H05B 41/28** (2013.01 - EP US); **H05B 41/2828** (2013.01 - EP US); **H05B 41/295** (2013.01 - EP US); **Y02B 20/00** (2013.01 - EP US)

Citation (search report)  

- [A] GB 2310964 A 19970910 - TECNINTER IRELAND LIMITED [IE]
- [A] US 5343122 A 19940830 - SUGIMORI HIDEO [JP], et al

Cited by  
EP1119224A1; FR2803977A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**EP 0948244 A2 19991006**; **EP 0948244 A3 20001213**; JP H11345694 A 19991214; US 6107747 A 20000822

DOCDB simple family (application)  
**EP 99106589 A 19990331**; JP 4949999 A 19990226; US 28242999 A 19990331